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| APPLICATION NO.                  | FILING DATE               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|----------------------------------|---------------------------|----------------------|-------------------------|------------------|
| 10/723,714                       | 11/26/2003                | Bing Ji              | 06299P2 USA             | 9797             |
| 23543                            | 7590 06/15/2006           |                      | EXAMINER                |                  |
| AIR PRODUCTS AND CHEMICALS, INC. |                           |                      | GOUDREAU, GEORGE A      |                  |
| PATENT DEI                       | PARTMENT<br>TON BOULEVARD |                      | ART UNIT                | PAPER NUMBER     |
| ALLENTOW                         | N, PA 181951501           |                      | 1763                    |                  |
|                                  |                           |                      | DATE MAILED: 06/15/2006 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)   | 11 jis<br>1 jis                         |  |  |  |  |
|---|--|--|---|--|--|--|--|
|   | 10/723,714   | JI ET AL.  | # * * * * * * * * * * * * * * * * * * * |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |   |  |  |  |  |
|   | George A. Goudreau   | 1763   |   |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover sheet with the   | correspondence ad  | dress                                   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w.  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION  B6(a). In no event, however, may a reply be to the second will expire SIX (6) MONTHS from the cause the application to become ABANDON | N.<br>imely filed<br>in the mailing date of this co<br>ED (35 U.S.C. § 133). |   |  |  |  |  |
| Status  |  |  | <u>.</u>                                |  |  |  |  |
| 1) Responsive to communication(s) filed on 22 M   | arch 2006  |  |   |  |  |  |  |
|   | action is non-final.   |  |   |  |  |  |  |
| · <u> </u>  | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |   |  |  |  |  |
| closed in accordance with the practice under E  | ·  |  | merits is                               |  |  |  |  |
| Disposition of Claims   |  |  |   |  |  |  |  |
| 4)⊠ Claim(s) <u>44-49 and 52-60</u> is/are pending in the application.  |  |  |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |   |  |  |  |  |
| 6)⊠ Claim(s) <u>44,46-49,52,53,55 and 58-60</u> is/are rejected.  |  |  |   |  |  |  |  |
| 7) Claim(s) 45,54,56 and 57 is/are objected to.   |  |  |   |  |  |  |  |
| ·   | 8) Claim(s) are subject to restriction and/or election requirement.  |  |   |  |  |  |  |
| Application Papers  |  |  |   |  |  |  |  |
| _   |  |  | ),<br>                                  |  |  |  |  |
| 9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |  |  |   |  |  |  |  |
| T i   |  |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |  |   |  |  |  |  |
| THE Date of declaration is objected to by the Examiner. Note the attached Office Action of John PTO-152.  |  |  |   |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |  |  |   |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |  |  |   |  |  |  |  |
| 1. ☐ Certified copies of the priority documents have been received.   |  |  |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |  |   |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |  |   |  |  |  |  |
| * See the attached detailed Office action for a list of   | of the certified copies not receive  | ed. ^  | A A                                     |  |  |  |  |
|   | (  | GEORGE GOUDRE<br>PRIMARY EXAMIN  | Goudrean<br>IER                         |  |  |  |  |
| Attachment(s)   |  | 6-06   | ·                                       |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) 🔲 Interview Summar  |  |   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail D 5) Notice of Informal   |  | 152)                                    |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | 6) Other:  | - atent Application (PTO   | -132)                                   |  |  |  |  |

- 1. This action will not be made final due to the new grounds of rejection.
- 2. Applicant's arguments with respect to claims of record have been considered but are most in view of the new ground(s) of rejection.

Page 2

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 44, 46-49, 52-53, 55, and 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference as applied in paragraph 4 of the previous office action.
- 6. Claims 45, 54, and 56-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1763

Any inquiry concerning this communication should be directed to examiner 7.

George A. Goudreau at telephone number (571)-272-1434.

George A. Goldreau Primary Examiner

Art Unit 1763